

**REMARKS**

Claims 1-17 and 19-29 remain in the application. Claims 1 and 9 have been amended. New Claim 109 has been added. The Examiner is authorized to charge **any** fees arising from this response to Deposit Account No. 10-0096.

The Examiner has rejected Independent Claims 1 and 9, and dependent Claims 2, 4-8, 10-11, 14-15, 19, 21, 26-27 and 29, under 35 U.S.C. §102(b) as being anticipated by USP 6,208,247 ("Agre"). Applicant traverses this rejection on the grounds that Agre does not teach a device for recording seismic signals detected by seismic sensors as recited in the amended claims, and in particular, Agre does not teach a seismic data recorder.

Agre teaches an electronic sensing station for sensing conditions or events. Col. 4, lines 51-55. As best shown in Fig. 3 of Agre, a sensor array 12 senses local environmental conditions or changes. The analog signal from the sensors 12 is digitized by an analog-to-digital converter 14. The digitized signal is then processed by a low power digital signal processor (DSP) 18 to identify conditions or events. Significantly, the digitized signal of Agre is only used to determine if an event occurs and is not mass "collected" or stored on board for later download. At Col. 3, line 29, Agre teaches

The digitized signal from the ADC is processed by a low power digital signal processor which analyzes power spectral density in selected bands. The power spectral density of the signal is then compared to a profile and a decision is made based on the result of the comparison. When the spectral density of the signal exceeds the threshold profile, the output of a series of comparators causes the programmable microprocessor to "wake up" and go from its power conserving state to a higher power operating state. The microprocessor then decides what action to take: whether to perform more signal processing and analysis, to activate the transmitter, to transmit the spectral density of the signal, to transmit the raw

signal data or perhaps to do nothing, depending on the signal and the programming of the microprocessor.

Agre teaches that microprocessor 20 may include a memory 21 on which is stored coefficients used by the DSP 18 (Col. 8, line 21-22), operational instructions for the microprocessor 20 (Col. 5, lines 57-60) or user programmed spectral profiles (Col. 7, line 19). See also Col. 9, lines 53-61.

The significance of the foregoing teachings is that Agre does not provide a seismic data recorder for recording seismic data. Nowhere in Agre is a “seismic data recorder” mentioned. To the extent the examiner would assert that memory 21 of microprocessor 20 could be equated to a seismic data recorder, the overall system of Agre is not disposed to record seismic signals from the sensor array 12 onto memory 21. Not only does Agre teach what information is stored on memory 21 (coefficients, operational instructions, spectral profiles), but the illustrated schematic of Fig. 3 does not illustrate any electrical connection between the sensor array 12 and memory 21. Rather, as is clearly shown in Fig. 3 and supported by the above referenced teachings of Agre, sensor array data is digitized and transmitted to DSP 18 for analysis (as opposed to being transmitted to memory 21). Memory 21 only has outgoing transmissions as shown in Fig. 3, either “DSP coefficients” sent to the spectrum analyzer 17 or “threshold values” sent to the threshold comparators 19.

Notably, at Col. 2, line 51, Agre further states that “it is not necessary for each node to have a known location before setup.” This is significant because without knowledge of a very specific location, any data recorded by sensor array 12 would be meaningless for purposes of geological analysis of the seismic data. Such analysis requires knowledge of the specific location of each sensor. This further supports the conclusion that the device of Agre and the seismic data collection unit of the claimed invention are different.

Nor is there any teaching in Agre that would support the position that the device therein is capable of recording the large amounts of seismic data intended to be “collected” and recorded by the device of Claims 1 and 9. Agre does not “collect” data as is recited in the preamble of the claims and as is intended by the Applicant. Simply put, the device of Agre and the claimed seismic data recorder of the invention have different functions and as such, have different electrical components and arrangements. The claims have been amended to clarify these differences.

For the foregoing reasons, the rejection of Independent Claims 1 and 9 under 35 U.S.C. §102 as being anticipated by Agre should be withdrawn and these claims should be passed to allowance.

The Examiner has rejected each of dependent Claims 3, 12-13, 16-17, 20, 22-25 and 28 under 35 U.S.C. §103(a) as being unpatentable over Agre in view of various references. The Examiner relied on Agre as teaching each of the elements of Claims 1 or 9 from which the foregoing dependent claims depend. Applicant traverses each of the rejections under 35 U.S.C. §103(a) because Agre does not, as explained above, recite each of the elements of either Claim 1 or 9. As such, a rejection under 35 U.S.C. §103(a) combining Agre with the various references identified above to render the invention obvious cannot be sustained. Since Applicant has shown the base Claims 1 and 9 to be patentable, then the dependent claims should also be patentable.

Of particular note, the Examiner rejected Claim 20 upon a combination of Agre with Wood. the Examiner relied on Agre for all elements of the claim except the GPS, for which the Examiner relied on Wood. However, as noted above, positional information is not necessary for the operation of Agre. Thus, the addition of a GPS as taught in Wood to the invention of Agre

would have no merit and Wood can be said to teach against such a combination. For this reason, the rejection of Claim 20 should be withdrawn.

Claim 109 recites a three component geophone and positional and orientation electronics. As set forth above, in order to function as a seismic data collection unit, position information is necessary so that data collected by the geophone can have a frame of reference. Moreover, to the extent the geophone is a three component geophone, orientation information must also be known. Since Agre is not detecting seismic signals for these purposes, Agre does not have either a three component geophone, nor positional or orientation electronics. For this reason, Agre does not anticipate newly added Claim 109.

For the foregoing reasons, allowance of the pending claims is earnestly solicited.

All of Applicant's arguments and amendments are without prejudice or disclaimer. Additionally, Applicant has merely discussed example distinctions from the prior art references. Other distinctions may exist, and Applicant reserves the right to discuss these additional distinctions in a later Response or on Appeal, if appropriate. By not responding to additional statements made by Examiner, Applicant does not acquiesce to Examiner's additional statements, including statements referring to any motivation to combine references or any naked statements of obviousness. The example distinctions discussed by Applicant are sufficient to overcome the anticipation and obviousness rejections.

A check in the amount of 810.00 is enclosed herewith. The Examiner is authorized to charge any additional fees arising from this response or credit any overpayment to Deposit Account No. 10-0096.

Respectfully submitted,  
JACKSON WALKER L.L.P.

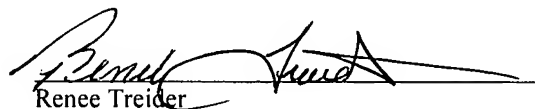


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